

## Recommended Installation Instructions

### Metal, Vinyl, Flush Mount and Recessed Fin Windows

These installation instructions are recommendations only. Local building codes may impose additional requirements, and those codes may supersede these instructions. Additional resources include:

**AAMA 2400 - Standard Practice for Installation of Windows with a Mounting Flange in Open Stud Frame Construction for Low Wind/Water Exposure**

**FMA/AAMA 100 - Standard Practice for the Installation of Windows with Flanges or Mounting Fins in Wood Frame Construction. (specifically designed for installations subject to extreme wind/water climate exposure)**

Kinro makes no warranty, expressed or implied, with respect to these or any other third party instructions. Kinro shall not be liable for any damage or liability that may arise in connection with any product installation not performed by Kinro

Tools Required – Level, Tape Measure, caulking gun, hammer or screw gun.

#### I. Rough Opening Preparation

- A. Opening for windows should be framed in accordance with the required standards for size of window used in order not to apply any loading to the window which may hamper its operation. The prepared rough opening should allow a minimum 1/8" clearance on each side, the head and the sill, including the thickness of pre-finished paneling, shims, liners, etc., where used.
- B. **Window rough opening should be level, plumb and square:** Check width, height, and diagonal measurements to assure the opening is level, plumb and square. **It is recommended that the sill of the rough opening be straight and level. Bowed or warped sill framing members can result in a crowned sill of the window.**
- C. Make certain all window mounting surfaces are securely fastened and flat around the perimeter of the rough opening. Check the opening for correct size per section A above.
- D. Weather Resistance: Prepare the rough opening in accordance with prevailing codes. A number of solutions exist that are appropriate for site location and it is not the intent of Kinro to advocate only one. Flashing guidelines for openings can be found in the current version of **AAMA 2400 and FMA/AAMA 100** as referenced above or as published by the manufacturer of the flashing system in use.

#### II. Window Installation

**Note: Installing vinyl windows with vinyl nailing fins on top of vertical or horizontal metal siding will void all warranties. Vinyl nailing fins will be damaged and leaks may occur. Aluminum mounting flanges are available specifically for this condition.**

- A. It is recommended to apply a quality, non-hardening, water resistant sealant to the back of the window mounting flanges in order to provide a water tight seal with the homes weather-proof envelope. Suitable types include 1/8" thick putty or butyl tape or a 1/4" bead of gunnable sealant. The tape or caulk bead should be applied centered over the mounting holes on the back of the window mounting flange.

#### **CAUTION:**

- For vinyl windows, do not use a sealant that contains solvents which may chemically attack vinyl.
- The use of foam tapes is not recommended for window installation.

- B. **Do not** remove any shipping clips (if provided on the window series being installed) and **always keep operating sash closed and locked during installation.**
- C. Always handle windows with care. Always pick them up by both side jambs using both hands. **Never** pick up and handle windows by the header only, sill only, or by one side jamb only. This can damage the windows and possibly rupture the glazing seal and/or joint caulking, thus resulting in a possible leak.
- D. Carefully insert the window into the opening. Center the window in the rough opening with the sill of the window resting on the sill of the rough opening. Press the mounting flange against the mounting surface.

**Note: All fasteners should be driven straight into the mounting flange. See section III for fastener information.**

- E. The following sequence of fastener installation is suggested: Drive the first fastener at approximately the center of one vertical frame jamb mounting flange. Drive the second fastener on the opposite mounting flange at the approximate center. Drive the third fastener at the center of the sill flange. (**Note: When installing windows check the window sill for straightness. If the window sill is crowned, apply light pressure at the center of window sill until it is level. While holding the sill level, drive the third fastener into the center of the sill flange.**) Drive the fourth fastener at the center of the head flange. Run fasteners, from one of the above fasteners, to the end of each frame member. Repeat this step until all fasteners have been inserted from the center of the vertical frame jamb outward to both ends of each member. Finish installing the fasteners from the center of the Frame Head and Sill outward to the ends of each member. See attached drawing for visual guide to fastener placement of assorted window types.

This sequence of fastener installation applies to both vertical and horizontal sliding windows, flush mount and recessed fin mount, for both metal and vinyl windows.

- F. Avoid damage to the seal between the glass and the window glazing member. Power drivers should be adjusted so as not to cause excessive dimpling of the window flanges. Careless mounting procedures could negate window certification and Kinro warranty.
- G. If the exposed surfaces of the rough inside opening are to be trimmed out with pre-finished paneling, it must be done in such a manner so as not to distort or twist the window frame members and make the operating sash tight or inoperable. If interior trim is installed prior to window installation insure that enough room is left to allow the window to fully seat against the exterior wall surface. Do not obstruct tilting sash operation or locking mechanisms with inside trim, wood molding, etc.
- H. Windows should be checked after installation to make sure that all moving panels, mechanisms, latches, and other hardware function properly. Any shipping clips must be removed prior to operation of the window. All windows should be checked for out-of-square or bowing of frame members. If any of the above problems are present, window should be removed and re-installed properly. **Double hung windows require extra care during installation. Double hung windows do not have fixed glass, which offers additional frame stability.**
- I. The window's exterior mounting flanges should be checked after the installation to assure an all-weather seal. It is recommended to seal the outside top of window (full width) with a good quality sealant for additional insurance and/or flash after installation in accordance **AAMA 2400** or **FMA/AAMA 100** as referenced above or instructions published by the manufacturer of the flashing system in use.
- J. For vinyl windows, leave an appropriate gap between the edge of the siding material and the window frame to allow for siding expansion and contraction.
- K. For vinyl horizontal sliding & fixed windows 72" in width and greater, Kinro recommends a sill support (minimum 1" thick) or angle bracket support, dependant on exterior home finish, to be installed underneath the projected frame sill on the outside.

- L. The use of any appurtenance system not approved for the Egress window or any alterations of an approved appurtenance system negates the window certification. The operating instructions and certification label are a permanent part of the Egress unit and must not be removed.
- M. There should not be any obstruction placed, attached, or located inside or outside an Egress window which would hamper direct access to Egress Devices or encroach on the minimum dimensions for horizontal, vertical, and square feet of area required for exiting.

**Caution:** Flammable fabrics could prevent access to the exit devices.

- N. An operational check of each installed **Egress Window** or **Device** shall be made at the installation site. For HUD manufactured homes it is recommended that the home manufacturer record and retain a permanent record of the serial number of the Egress unit in direct correlation with the serial number of the Manufactured Home in which it is installed. This will facilitate correction, recall and notification for non-compliance defects and/or imminent safety hazards.

### III. Fasteners

- A. Fasteners should be selected to ensure compliance with applicable building codes. Consideration should be given to wind loads, temperature variations, and other site conditions. Screws, nails, or staples may be used as fasteners for your installation into wood framing. Only screws should be used for window installation into metal home framing. The fastener must penetrate the framing at least one (1") inch, allowing for exterior sheathing.

Fasteners for use in wood framing include:

1. 6D smooth shank nails (min. 1 ½" penetration)
2. 6D ring shank nails
3. 16 gauge adhesive coated staples, 7/16" crown.
4. #8 pan head screw

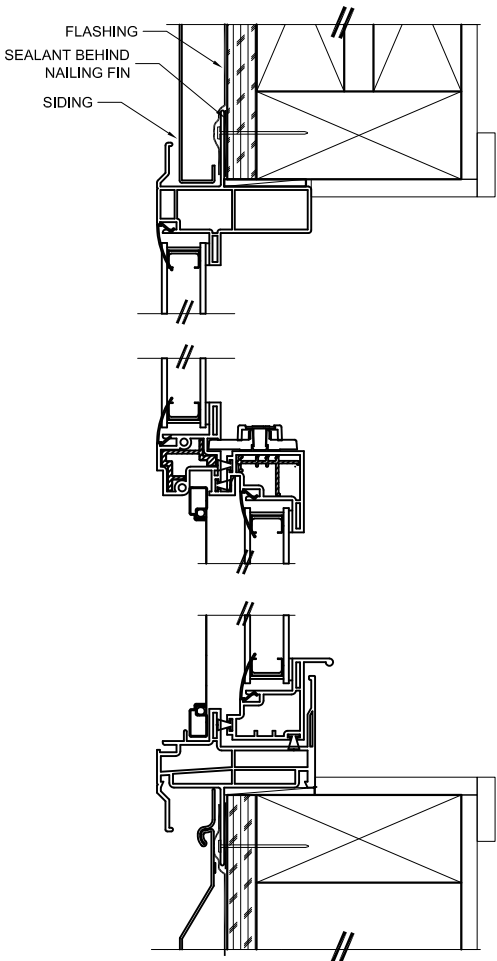
**Note:** Any fastener, either screw, nail, or staple that is left exposed to the weather should be plated or otherwise coated to prevent corrosion.

- B. It is suggested that one fastener be placed in or near every prepunched mounting hole for maximum anchorage strength. Fasteners should be spaced a maximum of 4" from the mounting flange corners and a maximum of 4 1/2" on center between fasteners around the perimeter of the mounting flange. The fastener location from the mounting flange edge should be no less than 0.135 for all products.

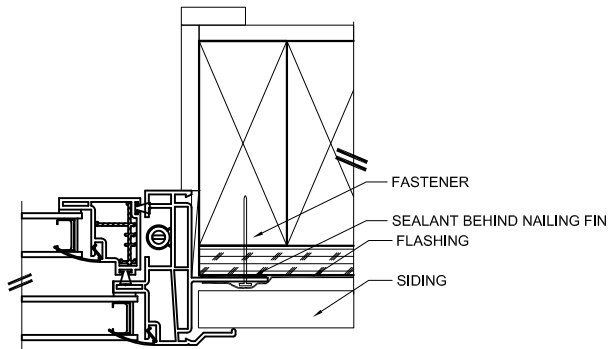
Note that actual anchorage methods and materials may be dictated by the project plans or applicable local codes. Methods may also be as directed by an Architect or Professional Engineer. Site specific requirements may be enforced by the Florida Building Code or Texas Department of Insurance. Consult the FBC and/or TDI website for anchorage specifics when applicable.

### IV. When replacing existing windows

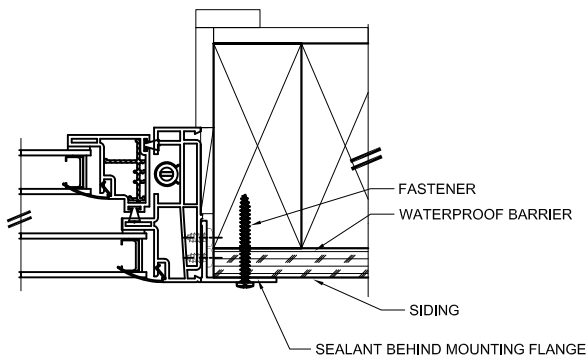
- A. Homes built prior to 1978 may contain lead based paints. Consult [www.epa.gov/lead](http://www.epa.gov/lead) for guidelines on removal of old products and management of lead paint.
- B. Guidelines for disposal and/or recycling of old products can be found at [www.epa.gov/recycle](http://www.epa.gov/recycle).



VERTICAL SECTION  
LAP FIN WITH VINYL SIDING



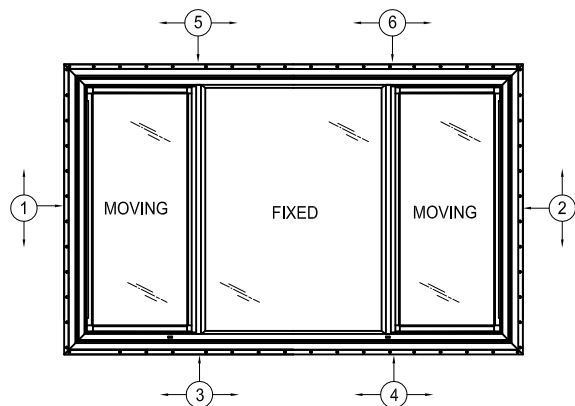
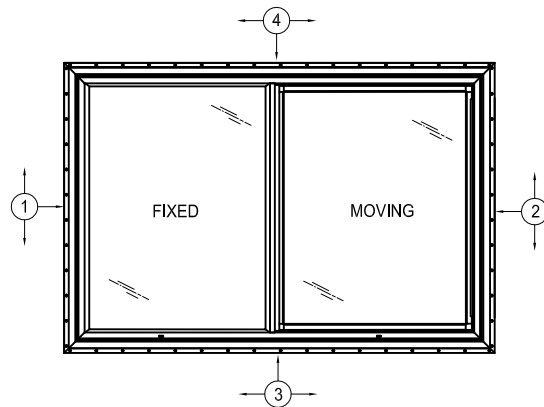
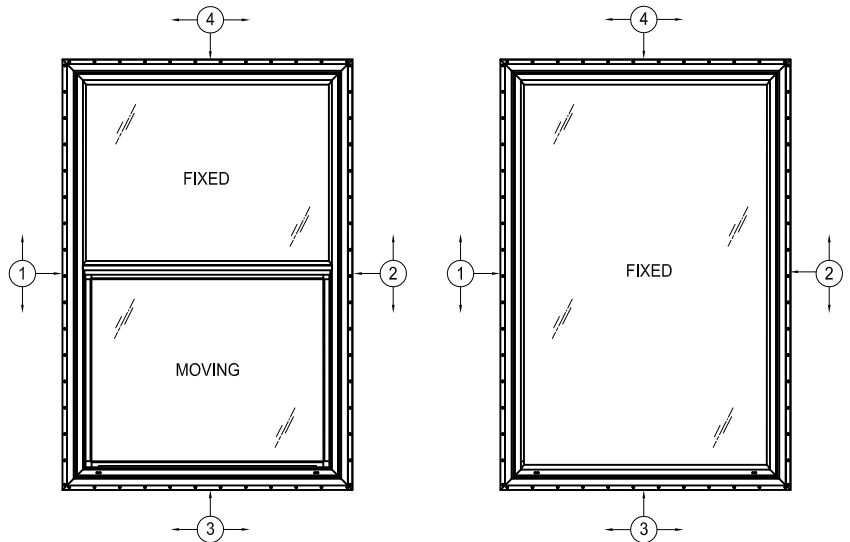
HORIZONTAL SECTION  
LAP FIN WITH VINYL SIDING



HORIZONTAL SECTION  
FLUSH FIN

IT IS RECOMMENDED TO ALWAYS START  
AT THE APPROX. CENTER OF THE NAILING FIN.

AFTER INITIAL FASTENERS ARE PLACED, RUN ALL  
OTHER FASTENERS FROM ONE FASTENER TO THE  
END OF THE NAILING FIN OR MOUNTING FLANGE.



TITLE: TYPICAL INSTALLATION AND ANCHORAGE DETAILS

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